AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior listings and versions thereof.

1-29. (Cancelled).

30. (New) A method for proliferating a hepatitis C virus comprising the steps of: providing a radial flow bioreactor which contains in a culture vessel as a main body thereof a porous carrier carrying an immobilized human hepatocyte thereon, which bioreactor can generate a continuous stream of a culture medium in radial direction in said vessel.

infecting said human hepatocyte with a hepatitis C virus, an infectious clone RNA thereof, or a combination thereof:

culturing said human hepatocyte by maintaining a stream of the culture medium in radial direction in said vessel, thereby proliferating the hepatitis C virus in said human hepatocyte.

wherein said infection of hepatitis C virus is carried out by adding hepatitis C virus to said culture medium, and said method further comprises the following steps: circulating the culture medium without supplying fresh medium after adding hepatitis C virus into said culture medium; stopping circulation of the culture medium; and circulating the culture medium without supplying fresh medium.

31. (New) A method for proliferating a hepatitis C virus comprising the steps of: providing a radial flow bioreactor which contains in a culture vessel as a main body thereof a porous carrier carrying an immobilized human hepatocyte thereon, which bioreactor can generate a continuous stream of a culture medium in radial direction in said vessel;

infecting said human hepatocyte with a hepatitis C virus, an infectious clone RNA thereof, or a combination thereof;

culturing said human hepatocyte by maintaining a stream of the culture medium in radial direction in said vessel, thereby proliferating the hepatitis C virus in said human hepatocyte.

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wherein said infection of hepatitis C virus is carried out by adding hepatitis C virus to said culture medium, and said method further comprises the step of increasing a supply rate of fresh medium and a supply rate of oxygen before adding hepatitis C virus to said culture medium.

- 32. (New) The method according to any one of claims 30 or 31, wherein the carrier is a particulate porous carrier.
- 33. (New) The method according to any one of claims 30 or 31, wherein the human hepatocyte is of an established cell line.
- 34. (New) The method according to claim 33, wherein the established cell line is the FLC-4 line (FERM BP-5165).
- 35. (New) The method according to any one of claims 30 or 31, wherein the human hepatocyte proliferates in three dimensions.